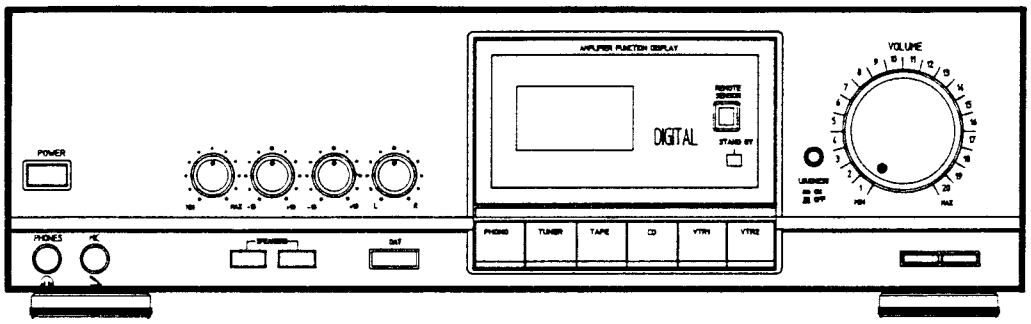
60

SAMSUNG

SERVICE MANUAL

RS-1200A

STEREO AMPLIFIER



CONTENTS

1. SPECIFICATION 1
2. SERVICING NOTE 2
3. LOCATION AND FUNCTION ..... 3~5
4. DISASSEMBLY 6
5. OPERATION INSTRUCTION ..... 7~8
6. TROUBLE SHOOTING PROCEDURE 9
7. BLOCK DIAGRAM 10
8. SCHEMATIC DIAGRAM 11
9. CIRCUIT BOARD DIAGRAM ..... 12~13
10. WIRING DIAGRAM 14
11. TR, IC, LCD LEAD LAYOUT ..... 15~19
12. IC PIN'S VOLTAGE READINGS ..... 20~21
13. EXPLODED VIEW 22
14. PARTS DESCRIPTION ..... 23~28

60

1. SPECIFICATIONS

1) POWER AMP SECTION

OUTPUT POWER : 100 WATTS/CH (8 OHM)

T.H.D : 0.02% (1KHz)

FREQUENCY RESPONSE : 20Hz-20KHz + 0.5dB

2) PRE AMP SECTION

- INPUT SENSITIVITY (100 WATTS/8 OHM)

  PHONO: 2.5mV (± 2dB)

  TUNER/TV/VTR/TAPE : 150mV (± 2dB)

  MIC : 0.5mV

- PHONO EQUALIZATION (RIAA)

  : 30Hz-15KHz ± 0.5dB

- PHONO OVERLOAD

  (AT 1KHz) : 150mV

- SEPARATION

  100Hz : 70dB

  1KHz : 70dB

  10KHz : 45dB

- SIGNAL TO NOISE RATIO (IHF-A)

  PHONO : 75dB

  CD : 98dB

- TONE CONTROLS

  BASS : 100Hz ± 6dB

  TREBLE : 10KHz ± 6dB

  LOUDNESS VOLUME – 30dB

  : 100Hz + 6dB, 10KHz + 4dB

3) VIDEO SECTION

INPUT SENSITIVITY/IMPEDANCE

VTR1: 1Vp-p/75 ohm

VTR2: 1Vp-p/75 ohm

4) GENERAL SPECIFICATIONS

1. POWER CONSUMPTION : 440W
2. SET SIZE (mm) : 420(W) x 115(H) x 310(D)
3. NET WEIGHT : 20Kg

2. SERVICING NOTE

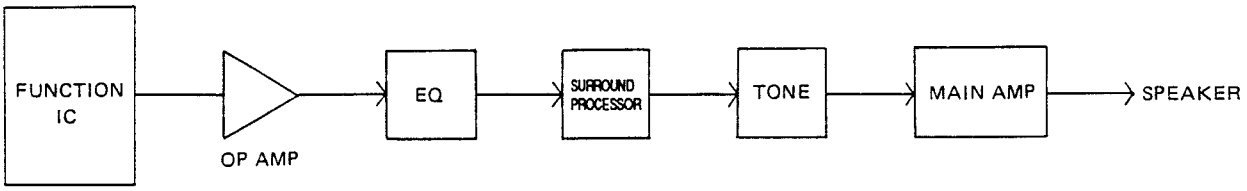
1. THERE ARE PARTS IN THE UNIT WHICH HAVE SPECIAL SAFETY FEATURES. WHEN REPLACEMENT IS REQUIRED, USE IDENTICAL AND STANDARDIZED PARTS ONLY.

2. THERE ARE TWO VOLTAGE SELECTORS IN THE UNIT WHICH WILL CHANGE THE VOLTAGE INPUT. BEFORE SERVICING OR OPERATING THE UNIT, CHECK IF THE VOLTAGE SELECTOR IS SET THE SAME VOLTAGE AS THE CURRENT BEING USED. OTHERWISE THE UNIT WILL NOT OPERATE OR FUSE MIGHT BURN OUT. WHEN SWITCHING THE VOLTAGE SELECTOR, UNPLUG THE POWER CORD. (DUAL VOLTAGE OPTION).

3. THE UNIT IS EQUIPPED WITH TWO PAIRS OF SPEAKER JACKS BUT TERMINAL B (SYSTEM B) DOES NOT OPERATE INDEPENDANTLY. EITHER THE TERMINAL A OR TERMINAL A + TERMINAL B WILL OPERATE. THEREFORE, IF YOU WANT TO USE JUST ONE PAIR OF SPEAKERS, USE SYSTEM A.

4. THE UNIT MISOPERATES OR THERE IS NO BUZZER SOUND WHEN USING REMOTE CONTROLLER;
   IF IT IS A MALFUNCTIONING CIRCUIT, REFER TO THE SCHEMATIC DIAGRAM.
   IF IT IS NOT A MALFUNCTIONING CIRCUIT, OPERATE THE UNIT AFTER CONNECTING THE 23 RESET TERMINAL TO GND TEMPORARILY.

5. WHEN OPERATING WITH COMPONENT SYSTEM, SOUND COMES THROUGH THE SPEAKER ONLY IF THE EQUALIZER AND SURROUND PROCESSOR (OPTION) ARE CONNECTED TO AMP.



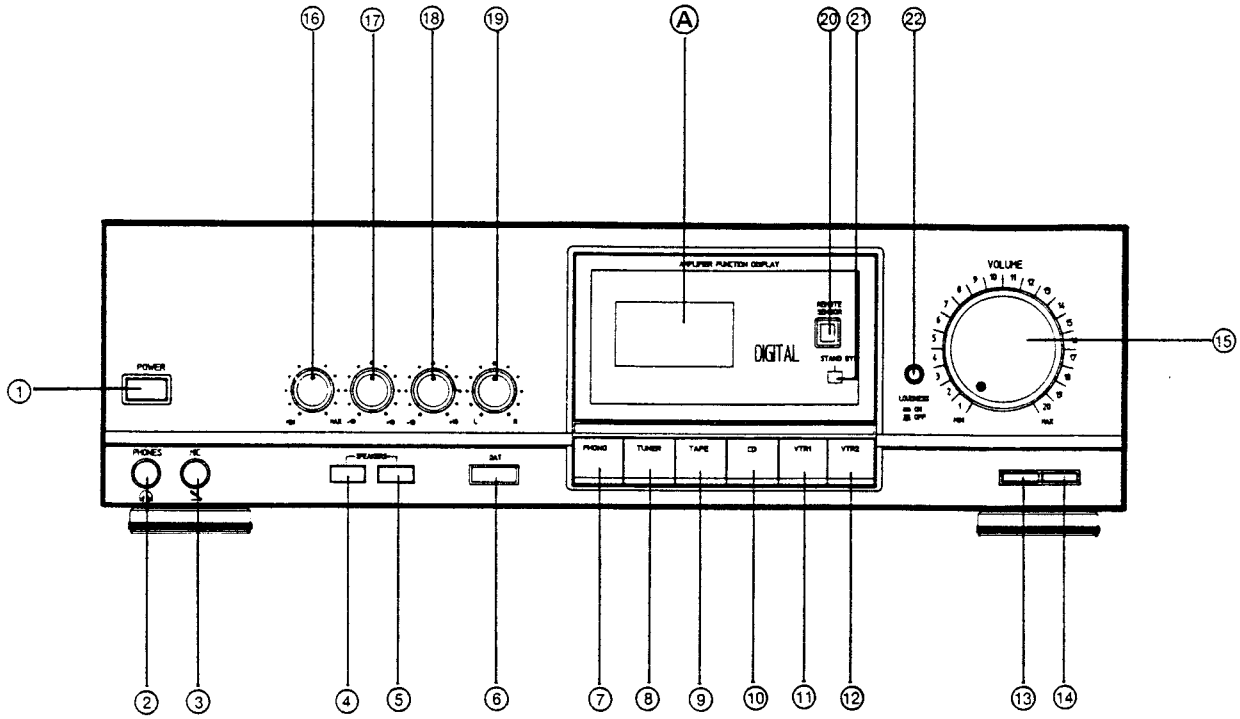
6. WHEN YOU PLAY THE UNIT WITHOUT EQUALIZER AND SURROUND PROCESSOR, CONNECT IN AND OUTPUT TERMINAL CONNECTING THE EQUALIZER AND SURROUND PROCESSOR WITH SHORT RING.

7. IF THE RELAY IS OFF, TURN POWER OFF AND THEN ON TO OPERATE THE RELAY AGAIN.

8. REMEMBER THAT WHEN THE MUTE IS ON, VTR DUBBING RECORDING, DAT AND TAPE RECORDING WILL NOT OPERATE.

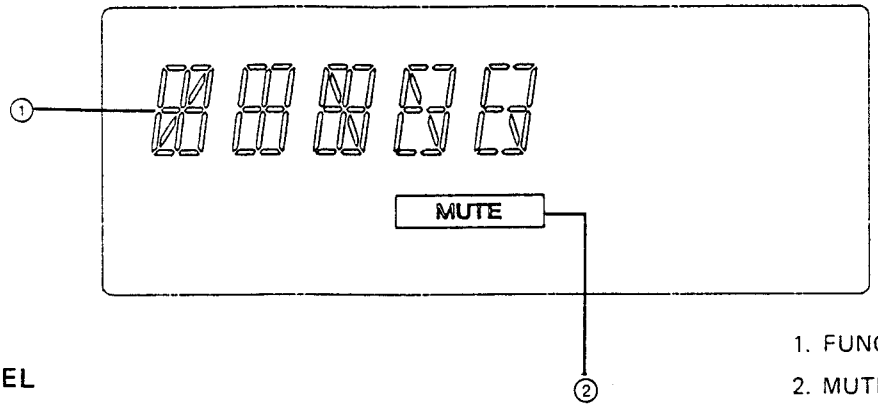
3. LOCATION AND FUNCTION

3-1. FRONT PANEL



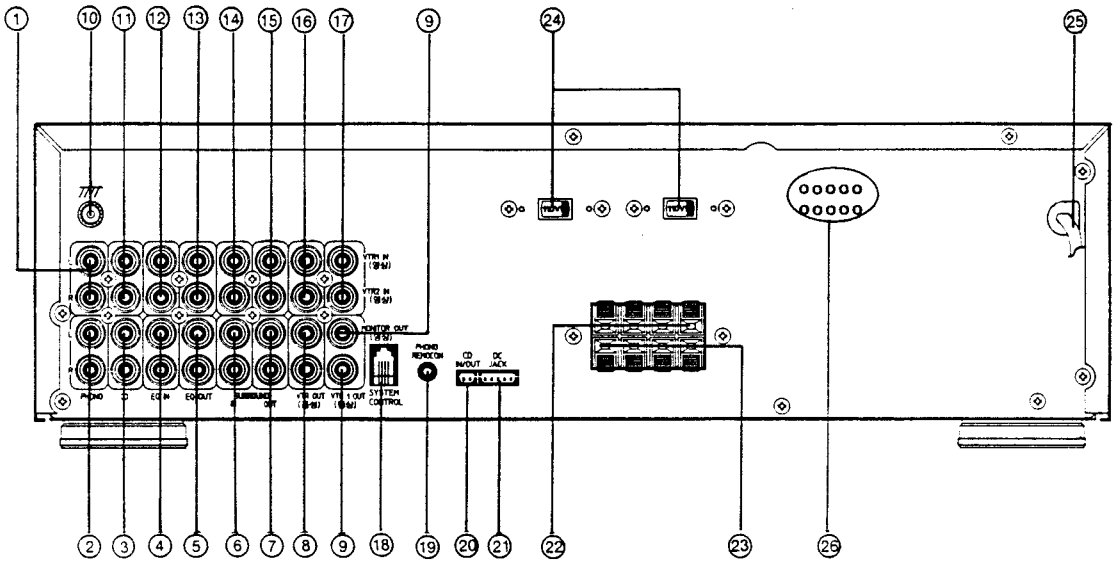
1. POWER BUTTON
2. HEAD PHONE JACK
3. MIC JACK
4. SPEAKER ON/OFF SELECTOR
5. A/A + B SPEAKER SWITCH
6. DIGITAL AUDIO TAPE SELECTION BUTTON
7. PHONO SELECTION BUTTON
8. TUNER SELECTION BUTTON
9. TAPE SELECTION BUTTON
10. CD SELECTION BUTTON
11. VTR1 SELECTION BUTTON
12. VTR2 BUTTON
13. MUTE BUTTON
14. MODE SWITCH
15. VOLUME
16. MIC MIXING VOLUME
17. BASS
18. TREBLE
19. BALANCE
20. REMOTE SENSOR
21. STAND BY
22. LOUDNESS SWITCH

3-2. Ⓐ SECTION



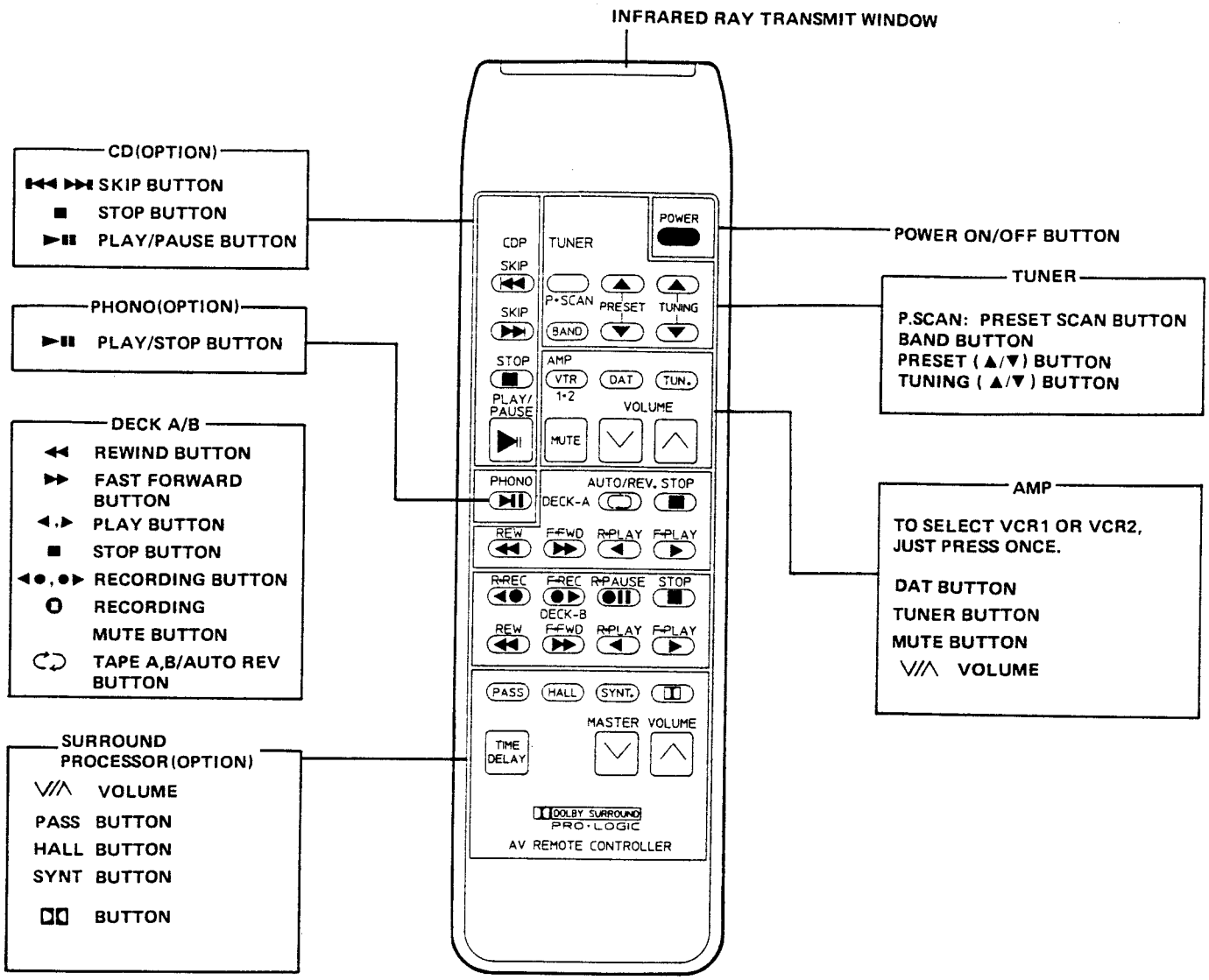
1. FUNCTION DISPLAY
2. MUTE DISPLAY

3-3. REAR PANEL

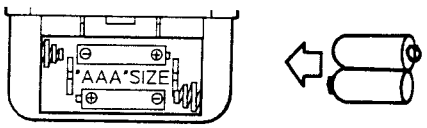


1. TUNER INPUT JACK
2. PHONO INPUT JACK
3. CD INPUT JACK
4. EQ INPUT JACK
5. EQ OUTPUT JACK
6. SURROUND INPUT JACK
7. SURROUND OUTPUT JACK
8. VTR1 VIDEO AUDIO OUTPUT JACK
9. VTR1 VIDEO OUTPUT JACK
9. MONITOR OUTPUT JACK
10. GROUND TERMINAL
11. TAPE INPUT JACK
12. TAPE OUTPUT JACK
13. DAT INPUT JACK
14. DAT OUTPUT JACK
15. VTR1 AUDIO INPUT JACK
16. VTR2 AUDIO INPUT JACK
17. VTR1, 2 VIDEO INPUT JACK
18. SYSTEM CONTROL JACK
19. T/TABLE REMOTE CONTROL JACK
20. CD CONTROL JACK (CD IN/OUT)
21. DC JACK
22. SPEAKER A
23. SPEAKER B
24. VOLTAGE SELECTOR (OPTION)
25. POWER CORD
26. AC OUTLET (OPTION)

3-4. REMOTE CONTROLLER



[HOW TO INSTALL BATTERIES FOR REMOCON CONTROLLER]

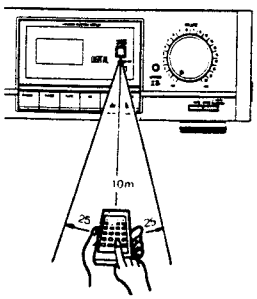


- OPEN THE BATTERY COVER AT THE BACK OF A REMOTE CONTROLLER AND LOAD 2 BATTERIES (1.5AAA TYPE) WITH PROPER POLARITY POSITIONING.
- CHANGE BATTERIES WHEN THE POWER BECOMES WEAK. REMOTE CONTROL UNIT CAN NOT BE ACTIVATED WITH LOW POWER.

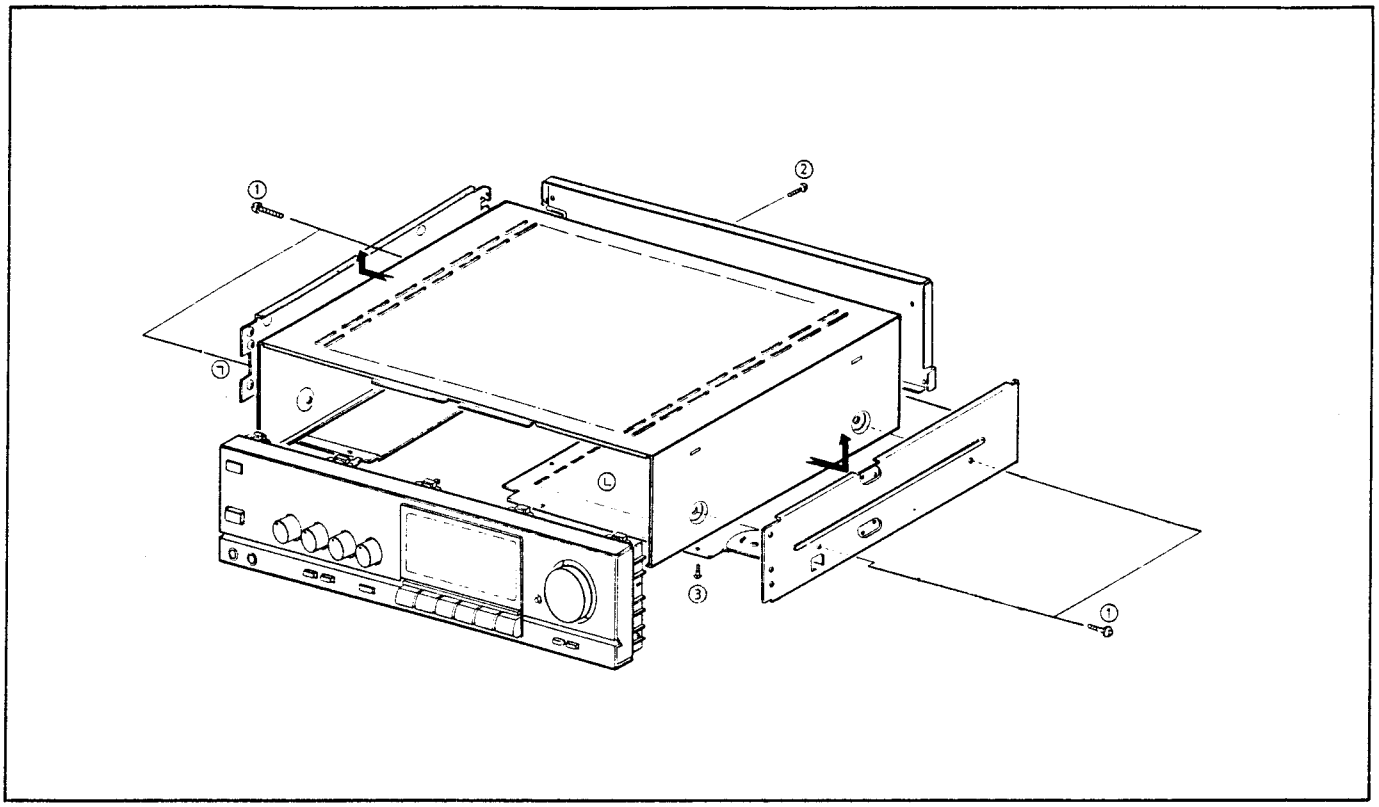
* REMOVE BATTERIES AFTER THEIR SHELP LIFE HAVE BEEN REACHED.

(HOW TO USE REMOCON CONTROLLER)

- POINT REMOTE CONTROL TOWARDS THE SIGNAL INPUT PORTION OF THE POWER AMP.
- WHEN USING THE FUNCTION BUTTON OF THE SURROUND-PROCESSOR, POINT REMOCON CONTROL TOWARDS THE REMOTE SIGNAL INPUT PORTION OF THE SURROUND PROCESSOR.
- OPERATION RANGE IS WITHIN 25 DEGREES OF EITHER WAY OF DEAD CENTER AND NOT MORE THAN 10 METER AWAY DISTANCE.
- REMEMBER THAT THE OPERATION RANGE WILL BE DIMINISHED OR REMOTE CONTROL WILL NOT OPERATE UNDER THE DIRECT SUNSHINE AND HEAT.



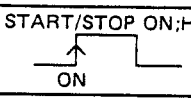
4. DISASSEMBLY



1. DISASSEMBLY OF CABINET TOP
   TAKE OUT 4 SCREWS (①) TAKE OUT ALL SCREWS (②) AND SPRING BOTH SIDES (OF THE CABINET-TOP) OUT AND LIFT UP IN THE DIRECTION OF ARROW.
2. DISASSEMBLY OF THE CABINET BOTTOM.
   TAKE OUT 9 SCREWS FROM THE BOTTOM AND PULL IT BACK TOWARDS YOU.

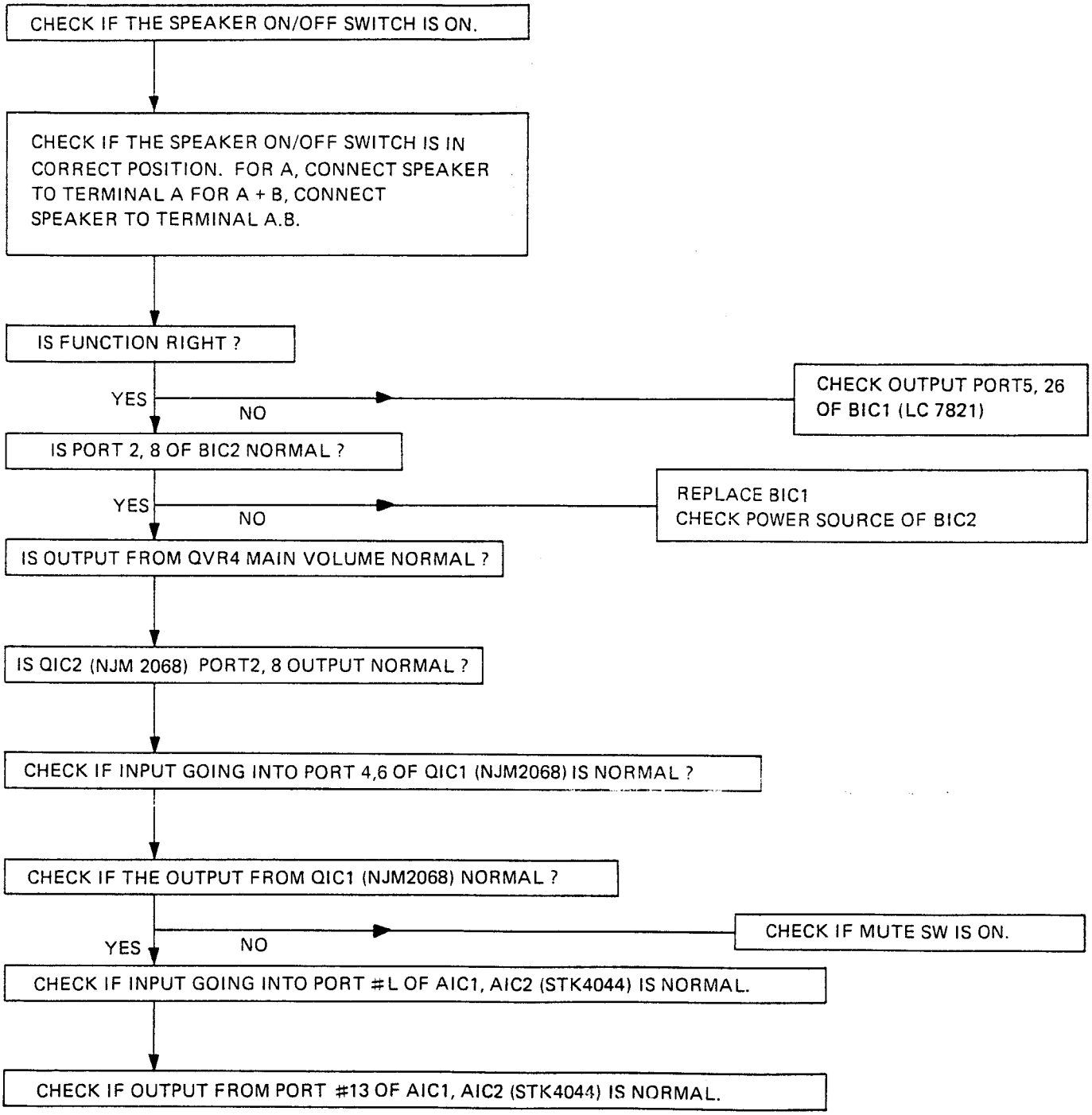
5. OPERATION INSTRUCTIONS

5-1. MICOM (LC6520H) UIC1 OPERATION

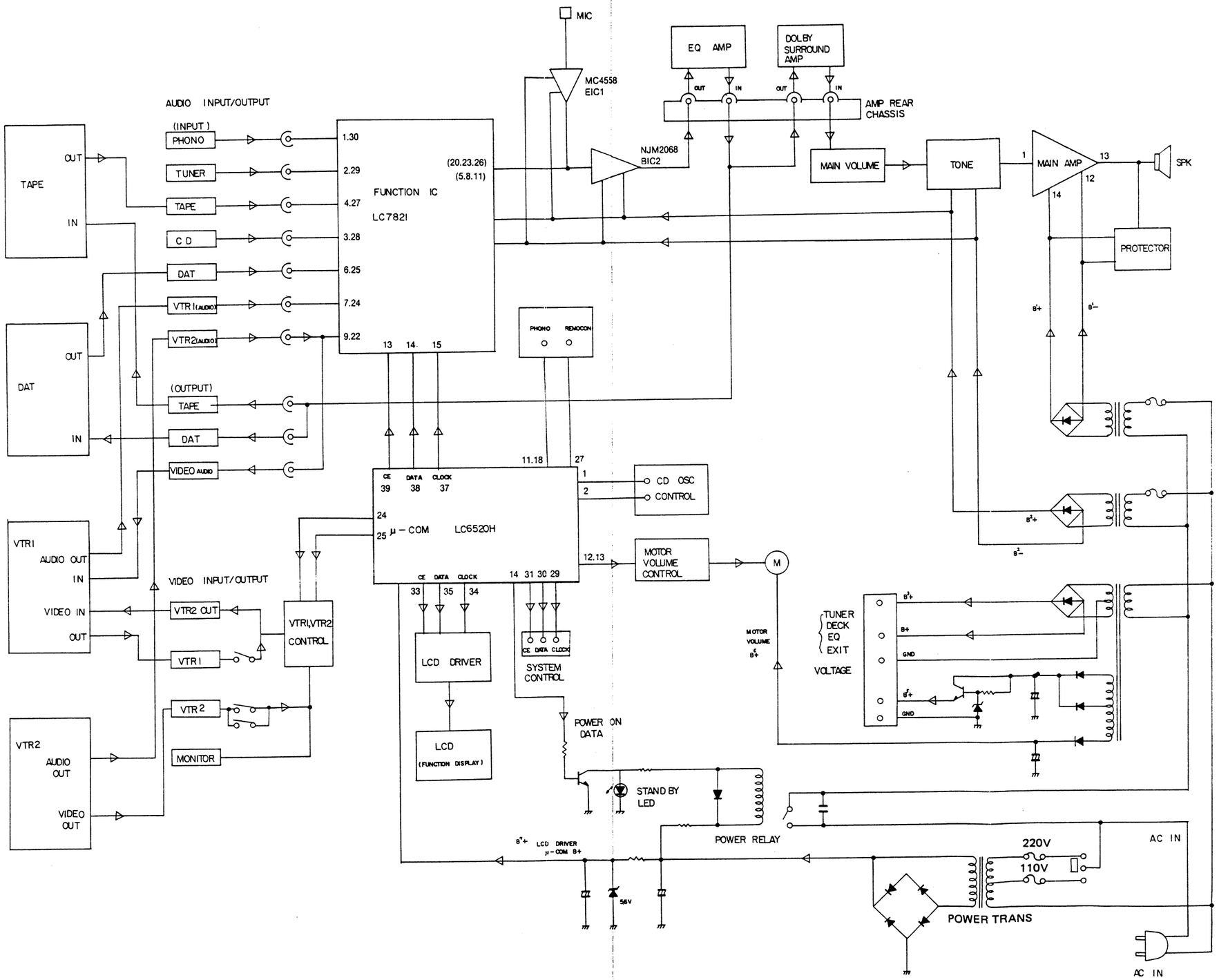
PIN NO.	INPUT / OUTPUT	OPERATION	PORT	H	L
1	INPUT	CD INPUT CD PLAY	PA2	○	
2	INPUT	CD OSC STOP OUTPUT TUNER FUNCTION 'LOW" AND FUNCTION "HIGH"	PA3		○
3	INPUT	FUNCTION INPUT (DAT, PHONO)	PB0	○	
4	INPUT	FUNCTION INPUT (VTR1, TUNER)	PB1	○	
5	INPUT	FUNCTION INPUT (VTR2, CD, MUTE)	PB2	○	
6	INPUT	FUNCTION INPUT (POWER, TAPE)	PB3	○	
7	OUTPUT	FUNCTION OUTPUT (PHONO, TUNER, CD, TAPE)	PC0	○	
8	OUTPUT	FUNCTION OUTPUT (DAT, VTR1, VTR2)	PC1	○	
9	OUTPUT	FUNCTION OUTPUT (POWER, MUTE)	PC2	○	
10	INPUT	VOLUME LOW: ELEC VOLUME HIGH: MOTOR VOLUME	PC3	○	
11	OUTPUT	T/TABLE START, STOP OUTPUT 	PD0	○	
12	OUTPUT	REMOTE VOLUME UP OUTPUT	PD1	○	
13	OUTPUT	REMOTE VOLUME DOWN OUTPUT	PD2	○	
14	OUTPUT	POWER OUTPUT	PD3	○	
15	OUTPUT		PE0	○	
16		NOT USED	PE1		
17	INPUT		PE2		○
18	INPUT	T/TABLE START: STOP INPUT	PE3		○
19	INPUT	TEST	TEST		○
20	INPUT	GND	Vss		○
21	OUTPUT	CLOCK OUTPUT	OSC 1		○
22	INPUT	CLOCK INPUT	OSC 2	○	
23	INPUT	RESET	$\overline{RES}$	○	
24	OUTPUT	VTR1 FUNCTION OUTPUT VIC1 PIN 13 "HIGH" OUTPUT	PF1/SI	○	

PIN NO.	INPUT / OUTPUT	OPERATION	PORT	H	L
25	OUTPUT	VTR2 FUNCTION OUTPUT VIC1 PIN 5, 6 "HIGH" OUTPUT	PF1/SO	○	
26	INPUT	T/TABLE REMOCON "LOW" ⟶ BELT TYPE T/TABLE REMOCON "HIGH" ⟶ LINEAR TYPE T/TABLE REMOCON	PF2/$\overline{SCK}$	○	
27	INPUT	REMOCON DATA INPUT	PF3/$\overline{INT}$	○	
28	OUTPUT	REMOCON MOTOR VOLUME LED DRIVE VOLUME UP/DOWN MUTE ON	PG0	○	
29	OUTPUT	REMOCON CLOCK OUTPUT	PG1	○	
30	OUTPUT	REMOCON DATA OUTPUT	PG2	○	
31	OUTPUT	REMOCON CE OUTPUT	PG3	○	
32	OUTPUT	LCD DRIVER $\overline{INH}$ OUTPUT	P10	○	
33	OUTPUT	LCD DRIVER CE OUTPUT	P11	○	
34	OUTPUT	LCD DRIVER CLOCK OUTPUT	P12	○	
35	OUTPUT	LCD DRIVER DATA OUTPUT	P13	○	
36	OUTPUT	BUZZER, OUTPUT	PJ0	○	
37	OUTPUT	FUNCTION CONTROL CLOCK OUTPUT	PJ1	○	
38	OUTPUT	FUNCTION CONTROL DATA OUTPUT	PJ2	○	
39	OUTPUT	FUNCTION CONTROL CE OUTPUT	PJ3		
40	INPUT	B^+ (5V)	VDD	○	
41		NOT USED	PA0		
42	INPUT	POWER ON/OFF INPUT	PA1	○	

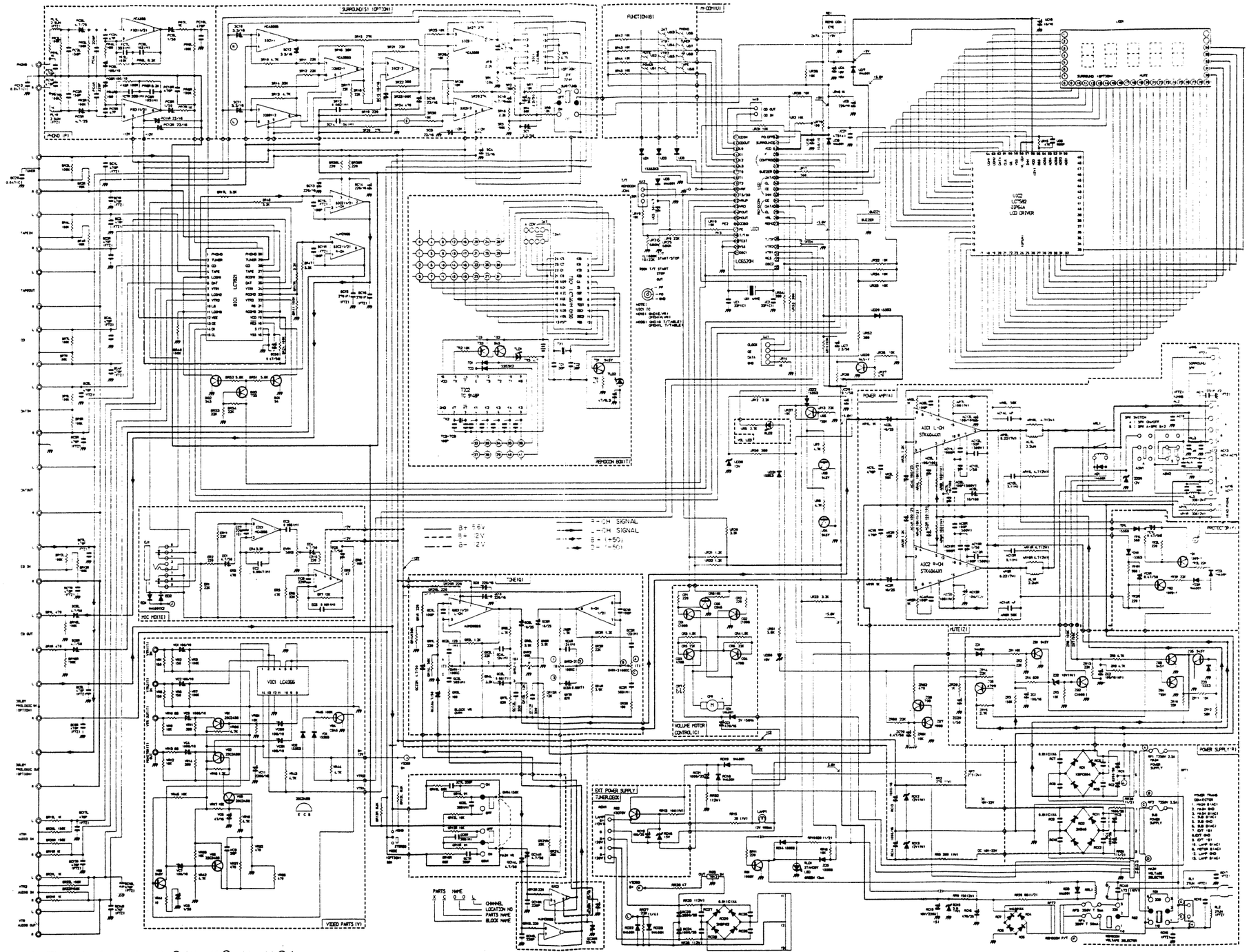
6. TROUBLE SHOOTING PROCEDURE


CHECK IF THE SPEAKER ON/OFF SWITCH IS ON.
CHECK IF THE SPEAKER ON/OFF SWITCH IS IN CORRECT POSITION. FOR A, CONNECT SPEAKER TO TERMINAL A FOR A + B, CONNECT SPEAKER TO TERMINAL A.B.
IS FUNCTION RIGHT ?
YES
NO
CHECK OUTPUT PORT5, 26 OF BIC1 (LC 7821)
IS PORT 2, 8 OF BIC2 NORMAL ?
YES
NO
REPLACE BIC1
CHECK POWER SOURCE OF BIC2
IS OUTPUT FROM QVR4 MAIN VOLUME NORMAL ?
IS QIC2 (NJM 2068) PORT2, 8 OUTPUT NORMAL ?
CHECK IF INPUT GOING INTO PORT 4,6 OF QIC1 (NJM2068) IS NORMAL ?
CHECK IF THE OUTPUT FROM QIC1 (NJM2068) NORMAL ?
YES
NO
CHECK IF MUTE SW IS ON.
CHECK IF INPUT GOING INTO PORT #L OF AIC1, AIC2 (STK4044) IS NORMAL.
CHECK IF OUTPUT FROM PORT #13 OF AIC1, AIC2 (STK4044) IS NORMAL.

7. BLOCK DIAGRAM



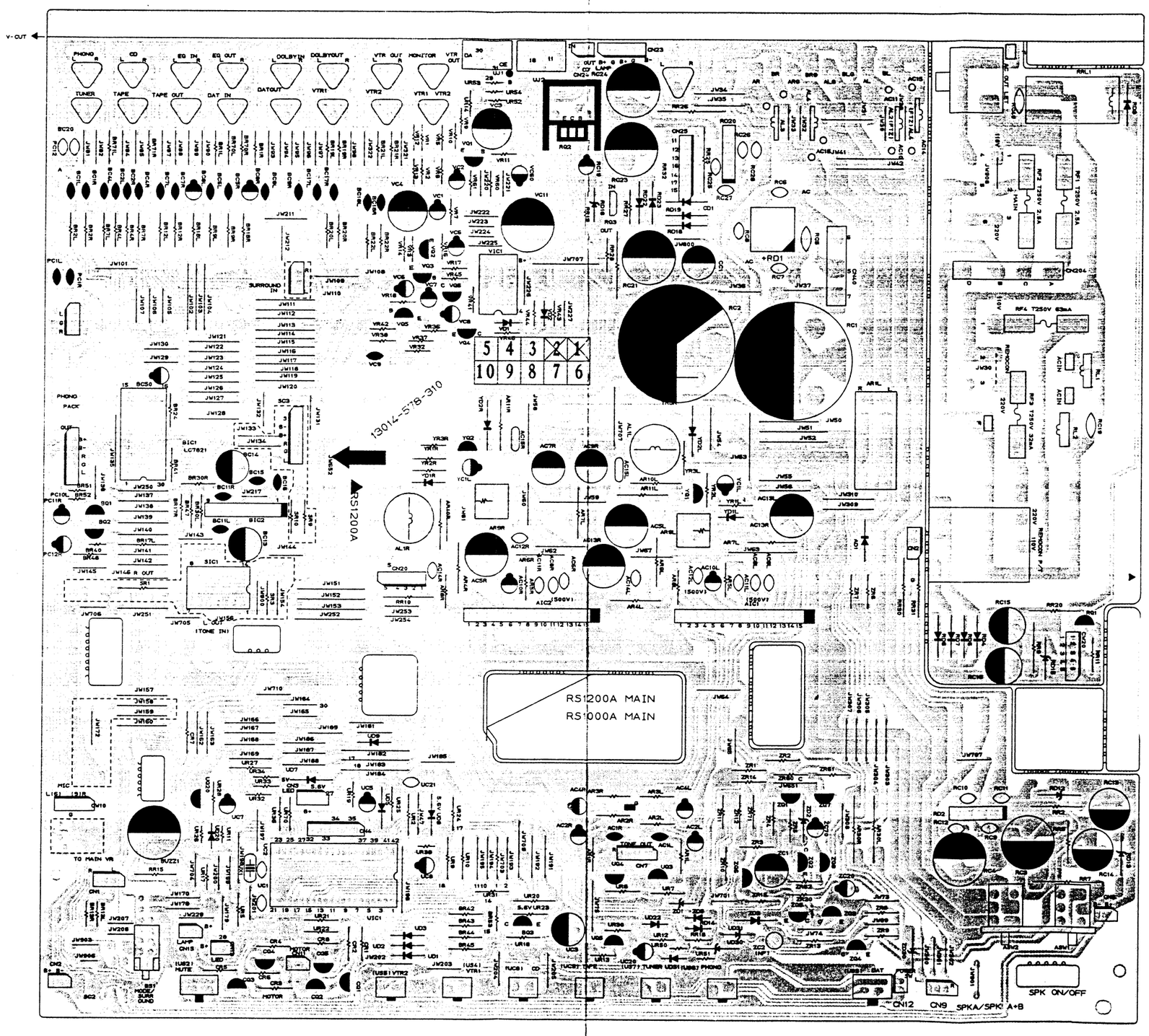
8. SCHEMATIC DIAGRAM



1. The unit of all resister is Ω (K = KΩ , M = MΩ).
   All resistors are 1/4W or 1/8W unless otherwise stated.
2. The unit of all resistors is μF, P = PF.
3. The specification described in the circuit change for
   quality improvement.

9. CIRCUIT BOARD DIAGRAM

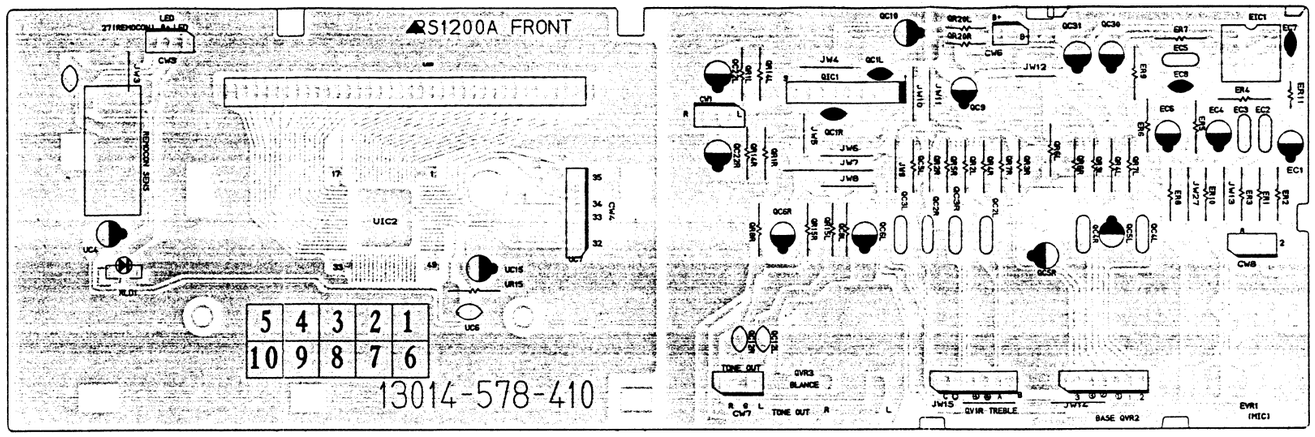
9-1. MAIN



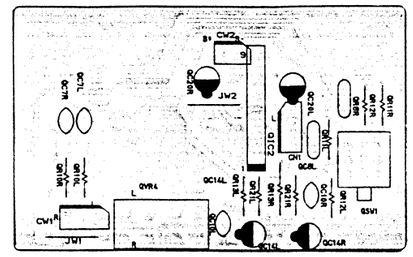
* This is a view of pattern side.

9-2. FRONT

FRONT PCB

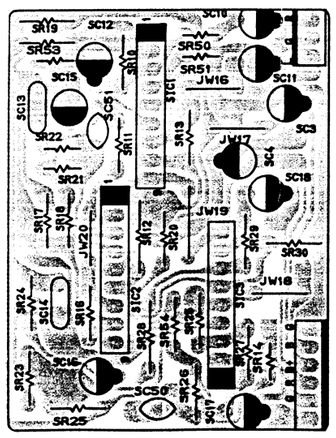


VOLUME PCB

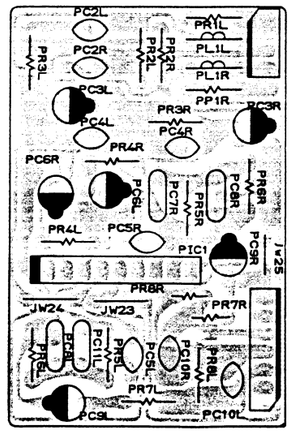


MOTOR-VR PCB

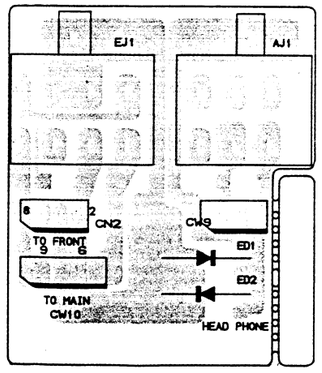
SURROUND PCB



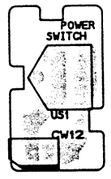
PHONO PCB



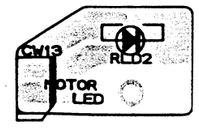
MIC, HEADPHONE JACK PCB



POWER S/W TACK PCB

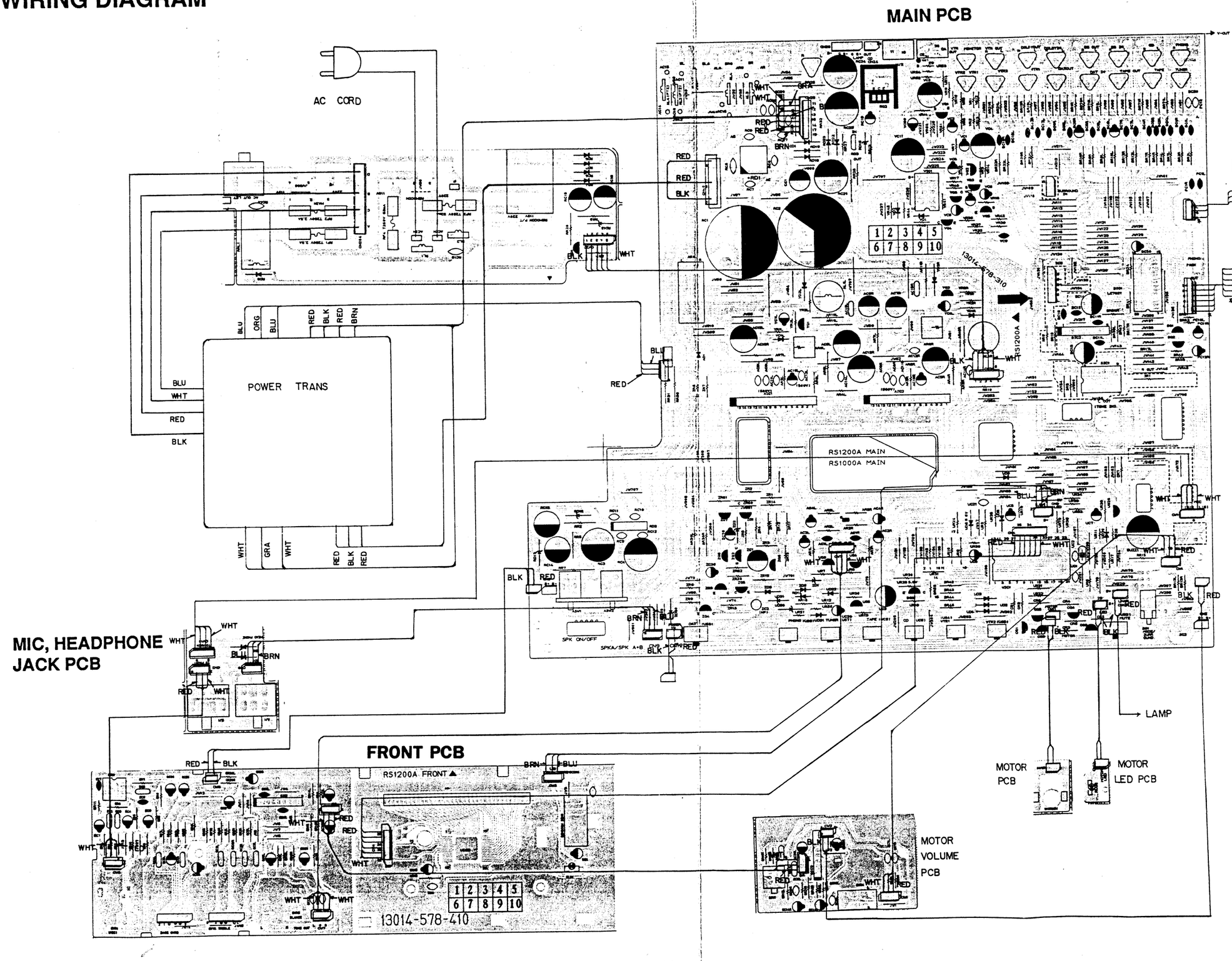


MOTOR LED PCB



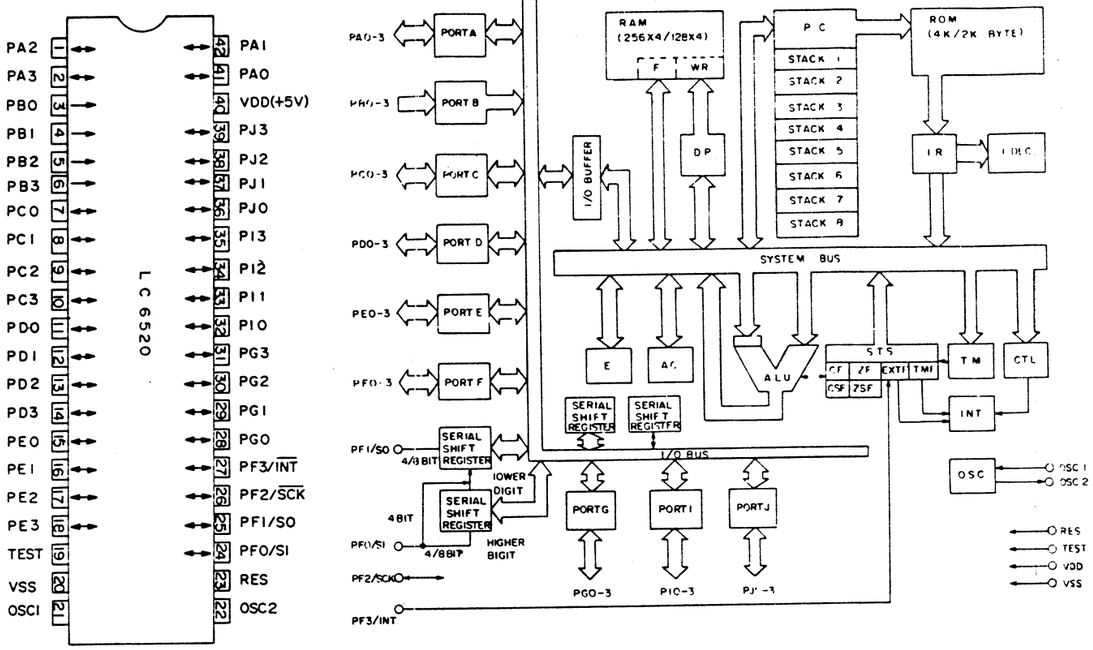
* This is a view of pattern side.

10. WIRING DIAGRAM

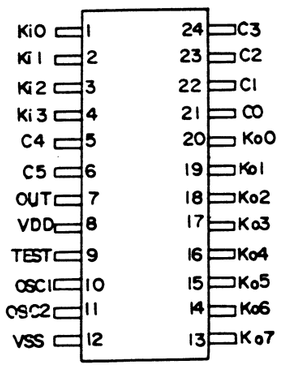


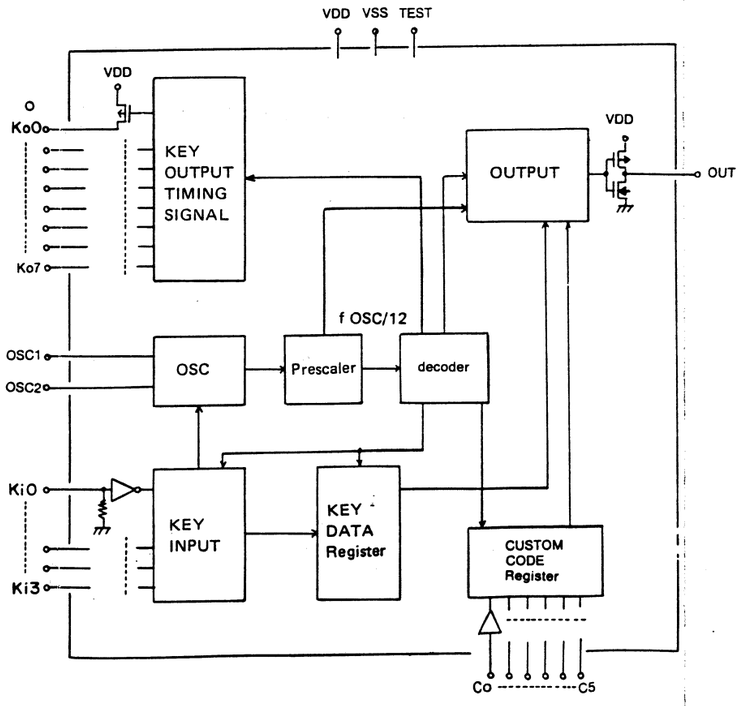
11. TR, IC, LCD LEAD LAYOUT

1. LC6520H (UIC1: MICOM)

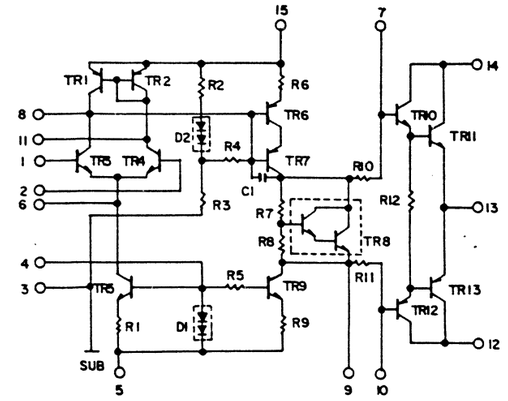


2. LC7461M (TIC1)

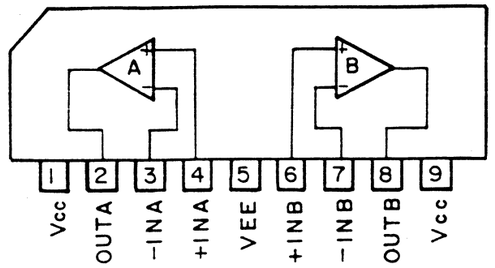




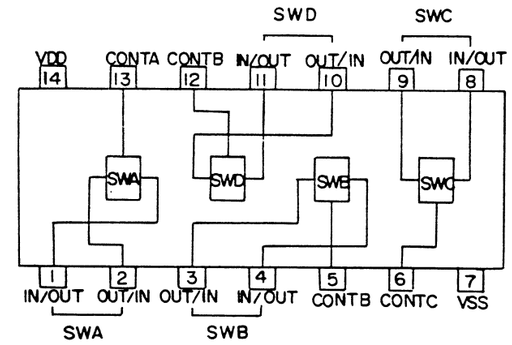
3. STK4044XI (AIC1, AIC2): IC-POWER



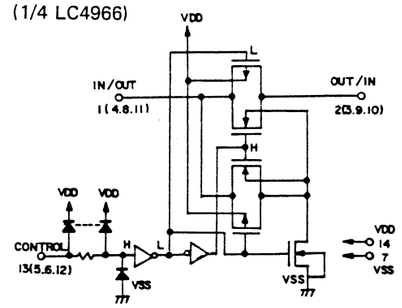
4. NJM2068SD (BIC2, QIC1)
MC4558S (EIC1, BIC3, IC501, IC601)
IC602, IC603, QIC2)



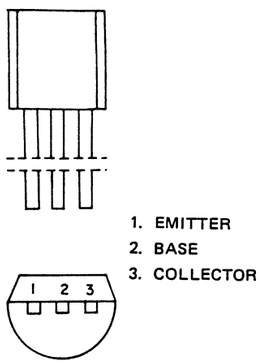
5. LC4966 (VIC1, SIC1): IC-SWITCH



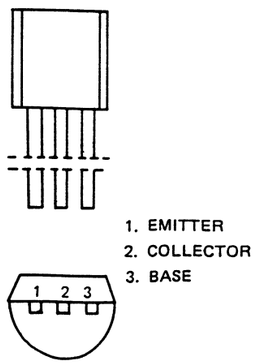
(1/4 LC4966)



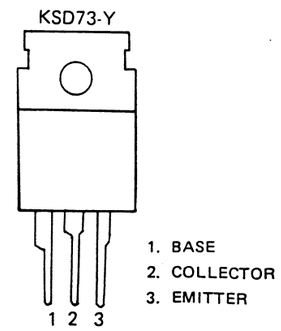
6. KSA733-Y/KSC945-Y
/KSC1008-Y/KSA708-Y



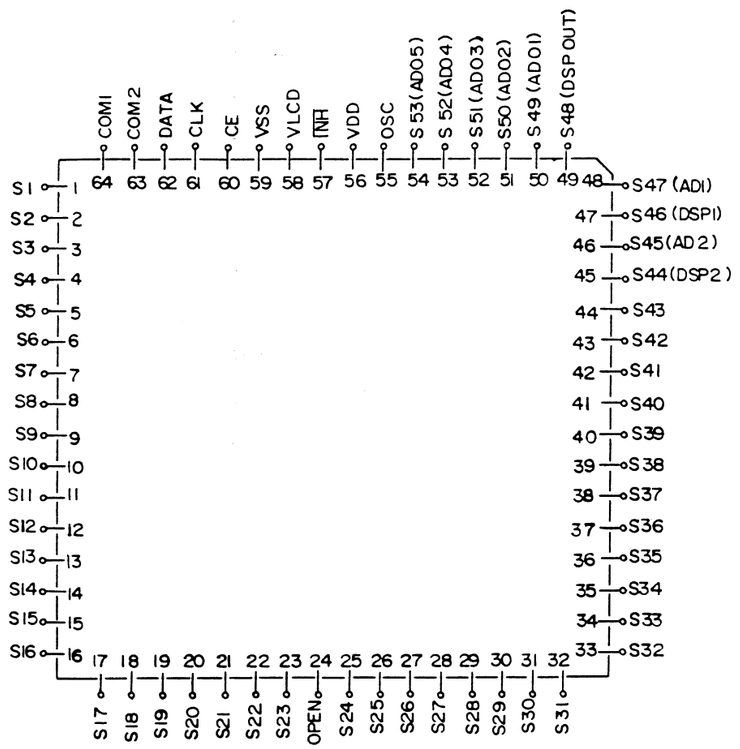
2SC 2458-Y

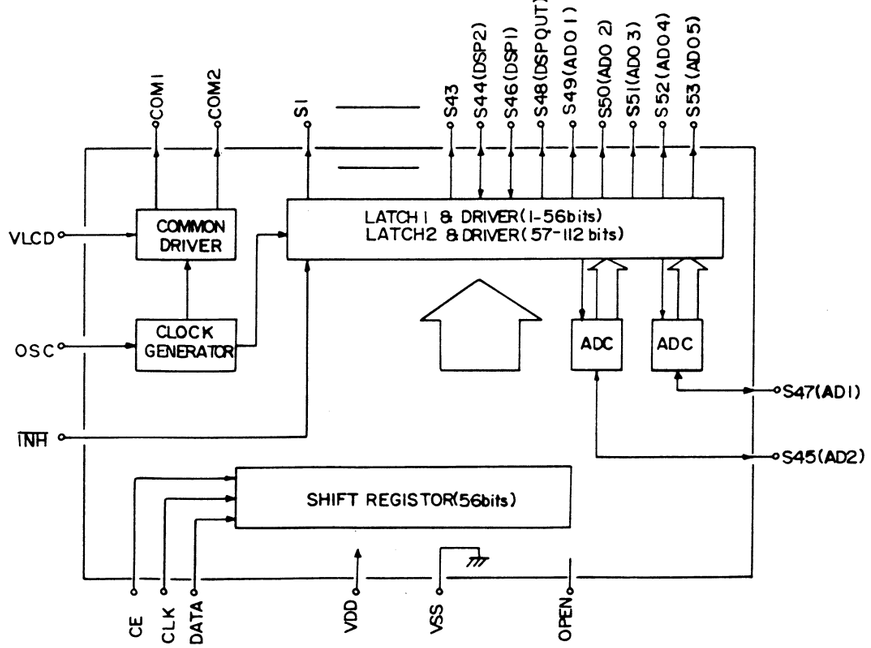


KSD73-Y

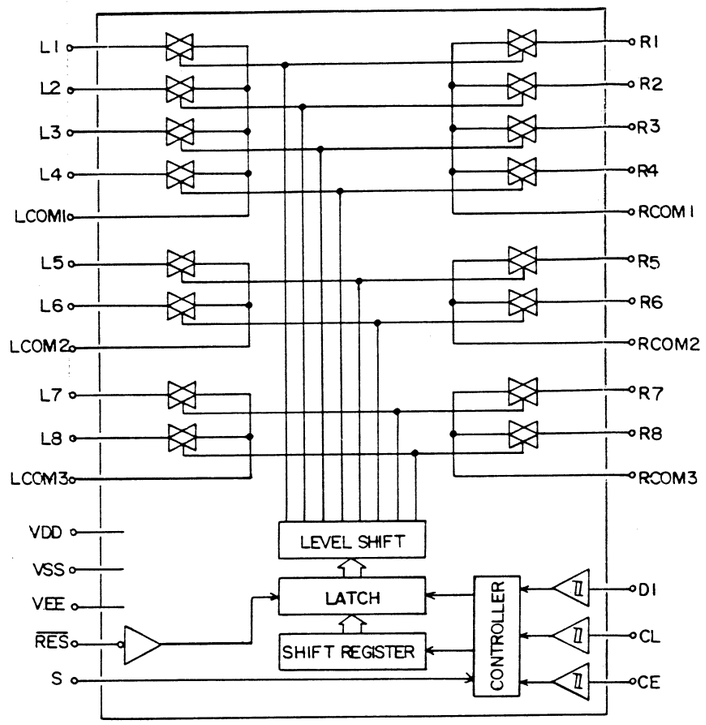


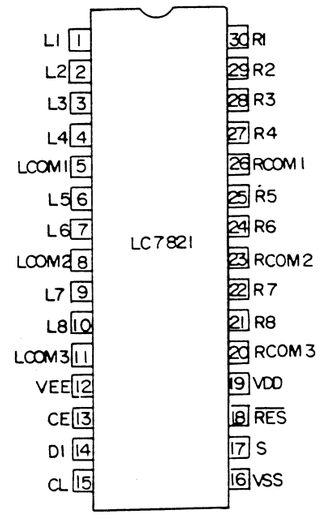
7. LC 7582A (UIC2): LCD DRIVER



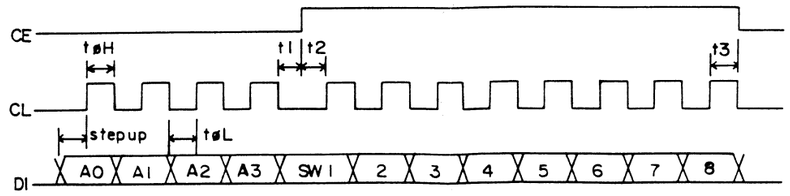


8. LC 7821 (BIC1): IC-FUNCTION



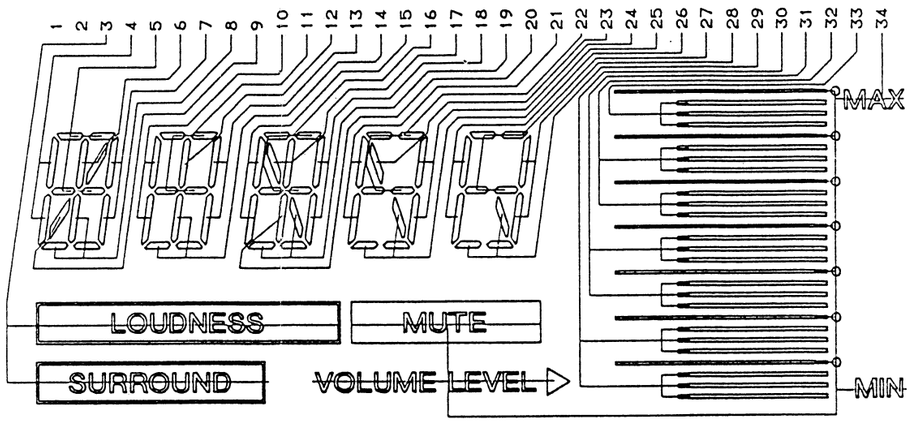


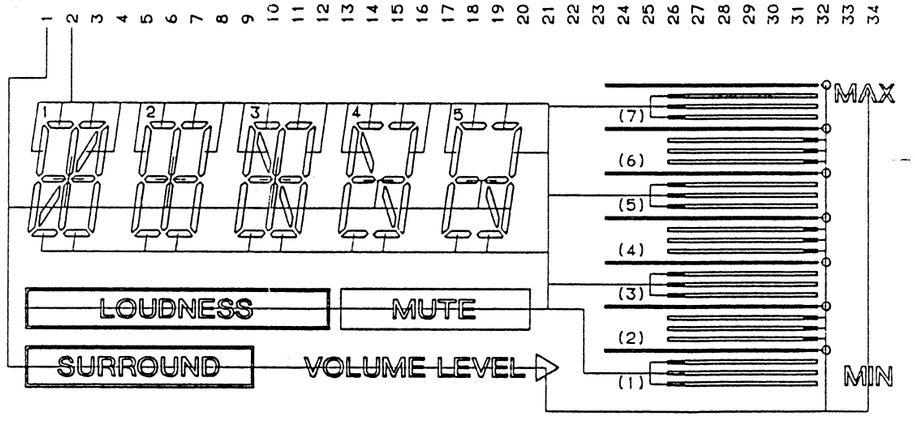
TIMING CHART

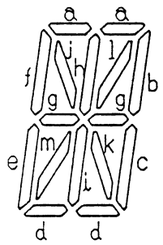


$t\phi H, t\phi L, t1, t2, t3, > 0.5\mu S$

9. LCD 8086MJP (LCD1: LCD DISPLAY)







NO	COM1	COM2
1	——	COM
2	COM	——
3	LOUD-NESS	SURR-OUND
4	1 f	1 e
5	1 a	1 g
6	1 l	1 h
7	1 b	1 c
8	1 d	1 i
9	——	1 m
10	2 f	2 e
11	2 a	2 g
12	——	2 h
13	2 b	2 c
14	2 d	2 i
15	3 f	3 e
16	3 a	3 g
17	3 j	3 h
18	3 b	3 c
19	3 d	3 k
20	——	3 i
21	4 f	4 e
22	4 a	4 g
23	4 j	——
24	4 b	4 c
25	4 d	4 k
26	5 f	5 e
27	5 a	5 g
28	5 b	5 c
29	5 d	5 k
30	(1)	(2)
31	(3)	(4)
32	(5)	(6)
33	(7)	——
34	MUTE	1)

12. IC PIN'S VOLTAGE READINGS

1. LC 6520H (UIC1) * TEST CONDITION: TUNER MODE

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
VOLTAGE	4.7	0	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	0	0.34	0.35	0.99	0.22	0.8	0
PIN NO.	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
VOLTAGE	0	0	0	2	2	5	0	0	0	4.7	0.146	4.6	4.6	2	4.7	0.6	0.1
PIN NO.	35	36	37	38	39	40	41	42									
VOLTAGE	0.19	0.378	0	0	0	4.9	4.3	0									

2. LC 7821 (BIC1)

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
VOLTAGE	0	0	0	0	0	0	0	0	0	0	−12.5	0	0	0	0	0	0
PIN NO.	18	19	20	21	22	23	24	25	26	27	28	29	30				
VOLTAGE	0	12.5	0	0	0	0	0	0	0	0	0	0	0				

3. STK 4044XI (AIC1, AIC2)

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
VOLTAGE	−0.2	−0.2	0	−54	−54	−0.8	1.2	54.5	−1.2	−1.2	55	−56.5	0	56.7	55.5

4. NJM 2068SD (BIC2, QIC1, QIC2)

IS LOCATION NO.	PON NO	1	2	3	4	5	6	7	8	9
BIC2	VOLTAGE	0	0	0	0	−12.5	0	0	0	12.5
QIC1	VOLTAGE	12.5	0	0	0	−12.5	0	0	0	0
QIC2	VOLTAGE	12.5	0	0	0	−12.5	0	0	0	0

5. LC 4966 (VIC1)

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	4.7	9.47	9.4	4.8	0.1	0.1	0	0	6.75	0.4	0.7	0	0.1	10

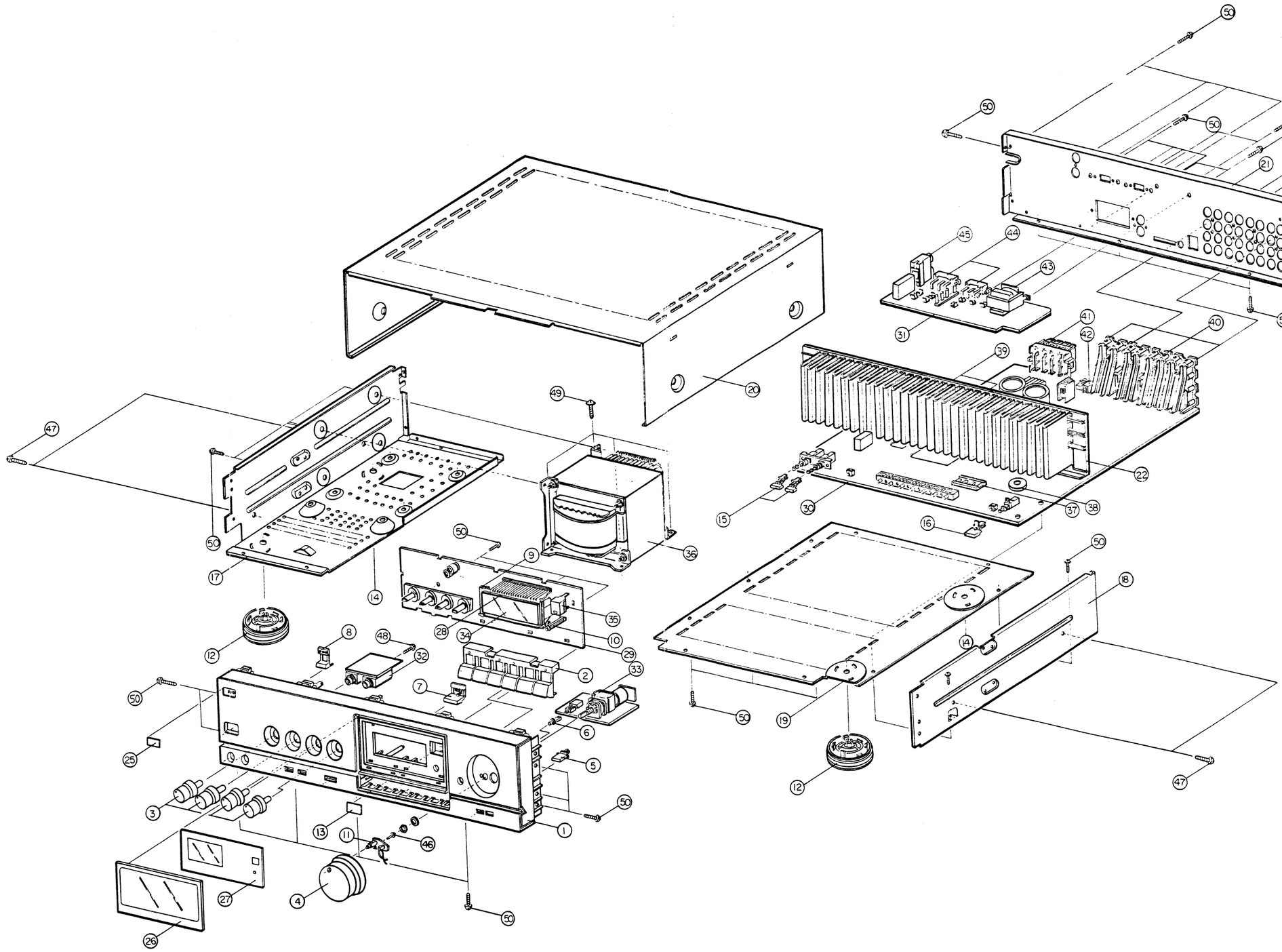
6. MC4558 (EIC1)

PIN NO.	1	2	3	4	5	6	7	8
VOLTAGE	0	0	0	−12.5	0	0	0	12.5

7. LC 7582 (UIC2)

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
VOLTAGE	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
PIN NO.	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
VOLTAGE	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3
PIN NO.	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51
VOLTAGE	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
PIN NO.	52	53	54	55	56	57	58	59	60	61	62	63	64				
VOLTAGE	2.3	2.3	2.3	3.6	4.7	4.7	4.7	4.8	0	0.64	0.2	2.4	2.4				

13. EXPLODED VIEW



14. PARTS DESCRIPTION

14-1. ELECTRONICAL PARTS

ASS'Y REMOCON (14909-500-510)

LOCATION NO.	CODE NO.	DESCRIPTION & SPECIFICATION	Q'TY	REMARK
CHIP	11449-518-101	CONDENSER AXIAL-LEAD; 50V UP050 B100-K	9	
CHIP	11449-518-102	CONDENSER AXIAL-LEAD; 50V UP050 B1000-K	2	
TTR02	12149-202-050	TR-CHIP; KSB 564A-Y	1	
TTR01, 03	12149-401-150	TR-CHIP; KSD 471-Y	2	
TIC01	12109-401-180	IC-REMOCON; LC7461M-8100	1	
TIC02	12119-101-900	IC-REMOCON; TC9148P (OPTION)	1	
	12169-301-290	DIODE-SW; 1SS53/1N4148, CT: 6PF	2	
TLD01, 02	12309-101-700	LED-INFRARED; EL1	1	
	13013-517-040	PCB-REMOCON; 175 x 56M/M 1.6T 1V-0 RS-12	1	
TX01, 02	14539-504-030	CERAMIC-RESONATOR; CSB455EBL	2	

ASS'Y MAIN PCB (19013-510-710)

LOCATION NO.	CODE NO.	DESCRIPTION & SPECIFICATION	Q'TY	REMARK
AR9R, AR9L	11039-757-228	R-CEMENT, RS7P 0.22-J RUG	2	
AR7L, AR7R, AR6L, AR6R	11048-487-101	R-METAL OXIDE, RS1P 100-J MINI TYPE	4	
RR13	11048-487-121	R-METAL OXIDE; RS1P 120-J MINI TYPE	1	
RR2	11048-487-271	R-METAL OXIDE; RS1P 270-J MINI TYPE	1	
RR5	11048-487-391	R-METAL OXIDE; RS1P 390-J MINI TYPE	1	
RR9	11048-587-151	R-METAL OXIDE; RS2P 150-J MINI TYPE	1	
AR11L, AR11R, RR7	11048-587-331	R-METAL OXIDE; RS2P 330-J MINI TYPE	3	
RR25, RR26	11058-527-010	R-FUSIBLE, 2P 1-J	2	
AR10L, AR10R, AR11L, AR11R	11058-537-476	FP RESISTOR, 2P 4.7-J	4	
UC21, BC20, PC12	11417-344-473	C-CERAMIC, HK CK45T; 0.047M-Z	3	
RC13, RC14	11609-401-510	C-ELECTROLYTIC, CE04W 16V 1000M	2	
PC11L, 11R VC11	11609-401-530	C-ELECTROLYTIC, CE04W 16V 2200M	3	

LOCATION NO.	CODE NO.	DESCRIPTION & SPECIFICATION	Q'TY	REMARK
RC3, RC4, RC23, RC24	11609-402-140	C-ELECTROLYTIC; EE 04W 35V 1000M	4	
AC2L, AC2R	11609-902-220	C-ELECTROLYTIC, LN; CE04W 50V 2.2M-M	2	
RC1, RC2	11669-138-822	C-ELECTRONIC; 80V 8200UF	2	
VIC1	12109-401-130	IC-INVERTER; CL4969	1	
UIC1	12109-401-190	IC-U COM; LC6520H-4294 AMP	1	
BIC1	12109-401-270	IC-FUNCTION; LC7821	1	
AIC1, AIC2	12119-208-110	IC-AF POWER AMP; STK-4044XI	2	
BIC2	12119-401-630	IC-DUAL OP AMP; MC4558S	1	
YQ1, 2	12139-301-310	TRANSISTOR; KSC 1009-Y	2	
UQ5, YQ1, 2, ZQ4, BQ3	12149-101-520	TRANSISTOR; KSA733-Y, TAPE	4	
CQ3, CQ4	12149-101-560	TRANSISTOR; KSA708-Y, TAPE	2	
ZQ1, UQ20, VQ6, UQ3, UQ4, VQ4	12149-301-900	TRANSISTOR; KSC 945-Y, TAPE	6	
ZQ3, 5, CQ5, BQ1, 2			5	
CQ1, CQ2, ZQ2	12149-301-930	TRANSISTOR; KSC1008-Y, TAPE	3	
VQ1, VQ2, VQ3, VQ5	12149-304-450	TRANSISTOR; 2SC 2458-Y/2SC3199-Y	4	
RQ2	12149-401-070	TRANSISTOR; KSD73-Y	1	
RD18, 19, CD1, AD1	12169-201-080	DIODE-RECTIFIER; 1N 4001,	4	
RD22, UD5, ZD1, UD7, 8, RD23			6	
RD1	12169-210-720	DIODE-BRIDGE-KBPC804; 8A 400V	1	
RD20, RD2	12169-210-210	DIODE-RECT; 2KBP02	2	
UD4, 1, 2, 3, YD1L, ZD3	12169-301-290	DIODE-SW; 1SS53/1N4148, CT, 6PF	6	
VD1, 2, UD20, YD1R, 2L			5	
YD2R, RD14, ZD5, UD22			4	
ZD2	12169-403-600	DIODE-ZENOR; UZP-8.2B	1	
RD16	12169-403-910	DIODE-ZN; 1W11.4-12.6V UZP-12B	1	
RD12, RD13, RD25			3	
RD16	12169-403-920	DIODE-ZN; 1W13 8-15 6V UZP-15B	1	
	13014-578-310	PWB-MAIN RS1200A; 330 x 300 94 1VO	1	
	13059-201-203	LEAD-FASTEN; RING 1007# 26 200 M/M	1	
	13078-475-130	CONNECTOR-WIRE/B, S; 5264-05/5395-05 1061# 26 300 M/M	1	
UJ2	13339-101-509	JACK-HEADPHONE; HSJ0912-01-042	1	
UJ1	13339-616-010	MODULE JACK; 616PCB4-D	1	
	13349-511-547	CONNECTOR-WAFER; 5268-05A	2	
	13349-511-561	CONNECTOR-WAFER; 5267-02A 2PTYPE	6	
	13349-512-565	CONNECTOR-WAFER; 5267-06A 6P TYPE	1	
	13349-512-568	CONNECTOR-WAFER; 5267-07A 7P TYPE	1	
UJ3	13349-511-573	CONNECTOR-WAFER; 5268-02A	1	
	13349-526-502	CONNECTOR-WAFER; 5267-03A	6	

LOCATION NO.	CODE NO.	DESCRIPTION & SPECIFICATION	Q'TY	REMARK
BS1	13529-203-090	PUSH-SWITCH; SPJ 222G 2C-2P	1	
ASW1	13529-204-400	PUSH-SWITCH; SPUL24	1	
US3, US2	13559-102-010	SWITCH-TACT; JIP1236A 160G	2	
US4	13559-201-060	SWITCH-BLOCK TACT; SPBT61	1	
UX1	14534-504-040	CERAMIC-RESONATOR; CSA 4.00MG CD22	1	
ARL1	14729-501-090	RELAY; DH12D2-OS(M)	3	
BUZZ1	14739-501-010	BUZZER; WES20-15PC	1	

ASS'Y FRONT PCB (19013-510-810)

LOCATION NO.	CODE NO.	DESCRIPTION & SPECIFICATION	Q'TY	REMARK
QVR4	11219-804-050	VR-ROUND MOTOR; RK1631MA03UA	1	
QVR1	11299-102-010	BLOCK-VR; RK164630	1	
QC10L, QC10R	11407-018-221	C-CERAMIC; CC45T SL 50V 220-K	2	
QC5L, QC5R	11629-101-640	C-ALUMINIUM, SOLID; 25V 0.68M-K	2	
LAMP1	12058-520-820	LAMP; DC12V 100MA 200M/M WAFER	1	
UIC2	12109-401-260	IC-LCD DRIVER; LC7582	1	
QIC2, EIC1	12119-401-170	IC-OP AMP; MC4558C	2	
QIC1	12119-401-760	IC-OP AMP; NJM2068SD/UPC457OHM	1	
ED1, ED2	12169-201-080	DIODE-RECTIFIER; 1N 4001, TAPE	2	
RE1	12199-101-130	REMOCON EYE; SV06C	1	
RLD1	12309-104-410	LED-LAMP; SLV-31 MC3	1	
RLD2	12309-104-700	LED; SLC-26VR5	1	
LCD1	12339-101-020	LCD; 8086MJP-AMP	1	
	13014-578-410	PWB-FRONT RS1200A; 330 x 247 94HB	0.5	
	13078-173-220	CONNECTOR-WIRE/B, S; 5102-03/5395-03 1061# 26 200M/M	2	
	13078-422-117	CONNECTOR-WIRE/B, S; 5264-02/5395-02 1571# 28 170M/M	1	
	13078-493-220	CONNECTOR-WIRE/B, S; 5264-03/5395-03 2524# 28 200M/M	2	
	13088-472-125	CONNECTOR-WIRE/B, L; 5264-02/JC25-02 1061# 26 250M/M	3	
	13088-484-140	CONNECTOR-WIRE/B, L; 526404/JC25-04 1533# 28 400M/M	2	
	13088-496-120	CONNECTOR-WIRE/B, L; 5264-06/JC25-06 2547# 28 200M/M	1	
AJ1	13339-105-007	JACK-HEAD PHONE; HYT 60-065(M)	1	
EJ1	13339-105-008	HEAD PHONE JACK; HYT80-065(M)	1	
	13349-527-502	CONNECTOR-WAFER; 5264-03A 3P	2	
QSW1	13529-204-390	PUSH-SWITCH; SPJ622	1	

ASS'Y PHONO PACK PCB (19013-511-010)

LOCATION NO.	CODE NO.	DESCRIPTION & SPECIFICATION	Q'TY	REMARK
PC2L, PC2R	11449-518-151	CONDENSER AXIAL-LEAD, 50V UP050 B150K	2	
PC4L, PC4R	11449-518-221	CONDENSER AXIAL-LEAD, 50V UP050 B220K	2	
PIC1	12119-401-170	IC-OP AMP, MC4558C	1	
PIC1	12119-401-630	IC-DUAL OP AMP; MC4558S	1	
	13349-105-030	CONNECTOR-WAFER, 3094-03A	1	
	13349-105-060	CONNECTOR-WAFER, 3094-06A	1	

ASS'Y POWER PCB (19013-511-110)

LOCATION NO.	CODE NO.	DESCRIPTION & SPECIFICATION	Q'TY	REMARK
RR9	11048-487-151	R-METAL OXIDE; RS1P 150-J MINI TYPE	1	
RC40	11469-501-120	C-CERAMIC, AC, 1KV 0.0047M-J	1	
RC16	11609-401-710	C-ELECTROLYTIC, CE04W 25V 470M	1	
RQ1	12149-301-930	TRANSISTOR, KSC1008-Y, TAPE	1	
RD3, RD4, RD5, RD6, RD7	12169-201-080	DIODE-RECTIFIER, 1N 4001, TAPE	5	
RD15	12169-404-110	DIODE-ZN; RD5.6FB/UZP-5.6B	1	
	13599-801-060	VOLTAGE SELECTOR, SDKGA4241A	2	
RRL1	14729-501-080	RELAY, DH12D1-0 (M)	1	

OPTION VOLTAGE

1) AC 110/220V DUAL VOLTAGE

LOCATION NO.	CODE NO.	DESCRIPTION	SPECIFICATION	Q'TY
	12869-216-810	TRANS POWER MAIN	110/220V 105 x 60M/M	1
	12869-216-910	TRANS POWER REMOCON	110/220V 35 x 14M/M	1
	13599-801-060	VOLTAGE SELECTOR	SDKGA4241A	2
RF1	14709-441-261	FUSE	T250V 2.5A	1
RF2	14709-441-261	FUSE	T250V 2.5A	1
RF3	14709-201-040	FUSE	51T 250V 32MA UL/CSA	1
RF4	14709-241-051	FUSE	51T 250V 63MA	1

2) AC 120V ONLY VOLTAGE

LOCATION NO.	CODE NO.	DESCRIPTION	SPECIFICATION	Q'TY
	12869-216-811	TRANS POWER MAIN	AC120V 105 x 60M/M	1
	12869-216-911	TRANS POWER REMOCON	AC120V 35 x 14M/M	1
RF1	14709-441-261	FUSE	T250V 2.5A	1
RF2	14709-441-261	FUSE	T250V 2.5A	1
RF4	14709-241-051	FUSE	250V 63mA	1

3) AC 220V ONLY VOLTAGE

LOCATION NO.	CODE NO.	DESCRIPTION	SPECIFICATION	Q'TY
	12869-216-810	TRANS POWER MAIN	110/220V 105 x 60M/M	1
	12869-216-912	TRANS POWER REMOCON	AC220V 35 x 14M/M	1
RF1	14709-441-262	FUSE	T250V 2.5A	1
RF3	14709-201-040	FUSE	T250V 32mA	1

4) AC 240V ONLY VOLTAGE

LOCATION NO.	CODE NO.	DESCRIPTION	SPECIFICATION	Q'TY
	12869-216-812	TRANS POWER MAIN	AC240V 105 x 60M/M	1
	12869-216-913	TRANS POWER REMOCON	AC240V 35 x 14M/M	1
RF1	14709-441-262	FUSE	T250V 2.5A	1
RF3	14709-201-040	FUSE	T250V 32mA	1

5) POWER CORD

LOCATION NO.	CODE NO.	DESCRIPTION	SPECIFICATION	Q'TY	NOTE
	13059-808-341	POWER CORD	KKP149C/B161 VDE 300M/M	1	VDE
	13059-808-342	POWER CORD	KKP149C/B161 VDE 520M/M	1	FTZ
	13059-808-301	POWER CORD	KKP-8W/B-165 SPT2 270M/M	1	UL/CSA

14-2. MECHANICAL PARTS

NO.	CODE NO.	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
1	16001-607-210	PANEL-FRONT	HIPS 94HB BLK	1	
2	17623-573-710	KNOB-FUNCTION	ABS 94HB	1	
3	17623-572-410	KNOB-ROTARY (A)	ABS 94HB	4	
4	17623-573-610	KNOB-VOLUME	ABS 94HB	1	
5	17623-573-110	KNOB-MUTE	ABS 94HB	1	
6	17623-573-010	KNOB-LOUDNESS	ABS 94HB	1	
7	17623-572-710	KNOB-DAT	ABS 94HB	1	
8	17623-573-510	KNOB-POWER	ABS 94HB	1	
9	16602-502-010	HOLDER-LCD (A)	ABS WHT + TI02	1	
10	16604-537-610	HOLDER-LED A	ABS 94HB BLK	1	
11	16604-521-510	HOLDER-LED	ABS 94HB BLK	1	
12	16072-500-110	FOOT	ABS 94HB HOT STAMPING	2	
13	17642-527-810	WINDOW-REMOCON	PMMA SMOKE BLUE	1	
14	16072-500-120	FOOT-1	ABS 94HB BLK	2	
15	17623-572-910	KNOB-SPK	ABS 94HB BLK	2	
16	17623-572-510	KNOB SURROUND	ABS 94HB BLK	1	
17	16621-500-410	FRAME-SIDE L	SBHG 1.0T	1	
18	16622-502-510	FRAME-SIDE R	SBHG 1.0T	1	
19	16122-535-710	CHASSIS-BOTTOM	SECC 1.0T	1	
20	16102-506-210	CABINET-TOP	PVC STEEL 0.75T	1	
21	16122-534-810	CHASSIS-REAR	EGI 1.0T	1	
22	15009-525-410	HEAT/SINK ASS'Y	AL BLK ANODYZING	1	
25	18024-600-530	BADGE-HI FI (OPTION)	COPPER 0.3T GOLD	1	OPTION
26	17653-535-910	WINDOW-AMP	ACRYL 2.0T	1	
27	17653-536-010	MASK LCD (A)	PC 0.5T	1	
28	17654-559-210	FILTER LCD (A)	PC 0.5T SMOKE WHT	1	
32	13339-105-007	JACK-HEAD PHONE	HYT60-065(M)	1	
33	11219-804-050	VR-ROUND MOTOR	RK16312MA-03 UA	1	
34	12339-101-020	LCD	8086MJP-AMP	1	
35	12199-101-130	REMOCON EYE	SV06C	1	
36		POWER-TRANS	105 x 60M/M	1	OPTION

NO.	CODE NO.	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
37	12109-401-190	IC-MICOM	LC6520H-4294AMP	1	
38	14739-501-010	BUZZER	WES20-15PC	1	
39	12119-208-110	POWER IC	STK-4044 XI	2	
40	13339-417-020	JACK RCA (8P)	S-439A OP	4	
41	13303-500-710	TERMINAL-SPK	AU8-2051	1	
42	13339-616-010	MODULE-JACK	616 PCB4-D	1	
43		REMOCON P/T	35 x 14 M/M	1	OPTION
44	13599-801-060	VOLTAGE-SELECTOR	SDKGA4241A	2	
45	13339-212-003	JACK AC OUTLET	DAO430 (PI4.0)	1	
46	16414-503-710	PIN-VOLUME	P.P	1	
47	17128-540-183	SCREW TAP TITH	2S-4 x 18 FE. FZB	4	
48	17558-230-101	SCREW TAP TITH SPEC	2S-3 x 10 FZY	1	
49	17428-240-081	SCREW TAP TITH TH	T-4 x 8 FZY	6	
50	17458-130-081	SCREW TAP TITE, BH	B-3 x 8 FE FZY	50	